

# TC-K630/K630ES

## SERVICE MANUAL

US Model  
AEP Model  
UK Model  
E Model  
TC-K630ES

Canadian Model  
TC-K630



Model Name Using Similar Mechanism	TC-W 550
Tape Transport Mechanism Type	TCM-CMAY B-27

### SPECIFICATIONS

Recording system	4-track 2-channel stereo
Bias	AC bias
Heads	Erase head × 1 (F & F head) Record head × 1 (Permalloy head) Playback head × 1 (LA head)
Motors	Capstan motor × 1 (DC servo motor) Reel motor × 1 (DC motor)
Wow and flutter	0.05% WRMS (NAB)
Fast-forward and rewind time	Approx. 90 sec. (with C-60 cassette)
Frequency response (DOLBY NR OFF)	

TYPE IV cassette (Sony METAL-ES)	20–21,000 Hz (±3 dB) 20–16,000 Hz (0VU recording)
TYPE II cassette (Sony UX-S)	20–19,000 Hz (±3 dB)
TYPE I cassette (Sony HF-S)	20–17,000 Hz (±3 dB)

Signal-to-noise ratio (NAB, at peak level)

Dolby NR switch	OFF	B-TYPE ON	C-TYPE ON
Cassette			
TYPE IV (Sony METAL-ES)	59 dB	66 dB	72 dB
TYPE II (Sony UX-S)	58 dB	65 dB	71 dB
TYPE I (Sony HF-S)	55 dB	62 dB	68 dB

Total harmonic distortion

1.0% (with Sony METAL-ES cassette)

### Inputs

Line inputs (phono jacks)	Sensitivity	77.5 mV (–20 dB)
	Input impedance	50 k ohms

### Outputs

Line outputs (phono jacks)	Rated output level	0.44 V (–5 dB) at a load impedance 47 k ohms
	Load impedance	Over 10 k ohms
Headphones (stereo phone jack)	Output level	0–2.5 mW at a load impedance of 32 ohms

### General

Power requirements	120 V AC, 60 Hz
Power consumption	20 W
Dimensions	Approx. 430 × 118 × 345 mm (w/h/d) (17 × 4 3/4 × 13 5/8 inches) including projecting parts and controls
Weight	Approx. 5.2 kg (11 lbs 8 oz)

### Supplied accessory

Audio connecting cord (2)

Design and specifications subject to change without notice.

STEREO CASSETTE DECK  
**SONY**®



## FEATURES



The TC-K630ES is a cassette deck equipped with a laseramorphous magnetic alloy head using LC-OFC winding for playback, and features the following functions.

- **3-head system (separate record, playback and erase heads)** allows you to instantly check the recorded sound while recording is in progress.
- **Bias control** adjusts bias current to the optimum level and brings out the best in every tape.
- **The Dolby HX PRO\* system** improves the linearity of the tape's high range response during recording.
- **Easy-to-read digital linear counter** shows the elapsed recording or playing time.
- **AMS, blank skip and music scan functions** provide easy access to a desired selection.


\* Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.

"DOLBY", the double-D symbol  "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

## SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

## ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

## SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

## LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

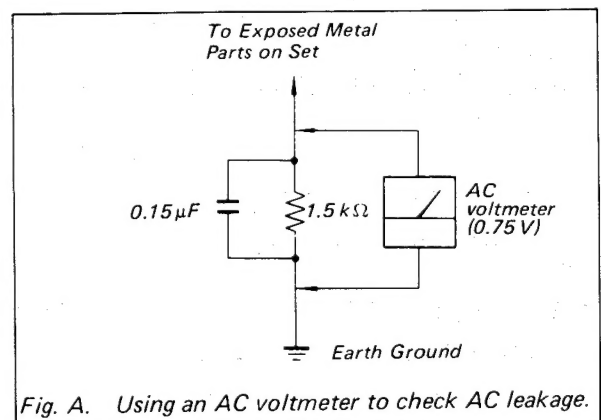


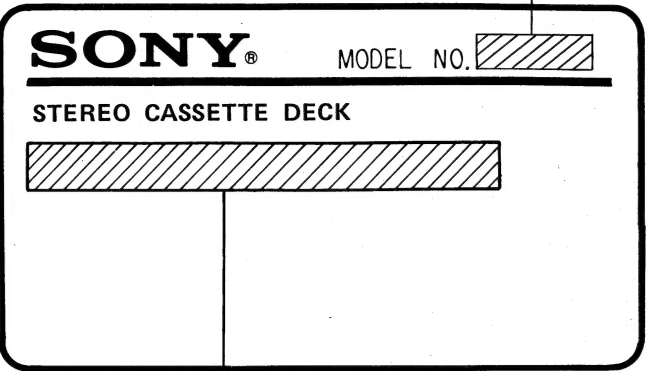
Fig. A. Using an AC voltmeter to check AC leakage.

SECTION 1  
GENERAL

TABLE OF CONTENTS

Section	Title	Page
Specifications		1
Features		2
1. GENERAL		
1-1. Model Identification		3
1-2. Location of Controls		3
2. MECHANICAL ADJUSTMENTS		4
3. ELECTRICAL ADJUSTMENTS		4
4. DIAGRAMS		
4-1. Semiconductor Lead Layouts		8
4-2. Printed Wiring Boards		9
4-3. Audio/System Control Section Schematic Diagram		13
4-4. Display Section Schematic Diagram		18
5. EXPLODED VIEWS		20
6. ELECTRICAL PARTS LIST		24

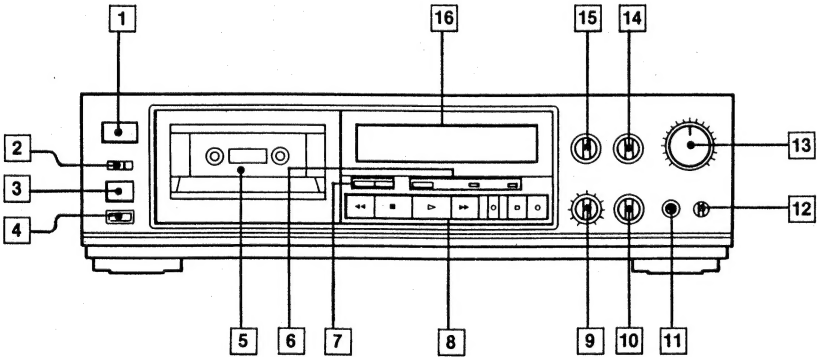
1-1. MODEL IDENTIFICATION  
(Specification Label)



TC-K603  
TC-K630ES

Canadian model: AC 120V 60Hz 20W (TC-K630)  
US model: AC 120V 60Hz 20W  
AEP model: AC 220V~50/60Hz 20W  
UK model: AC 240V~50/60Hz 20W  
E model: AC 120, 220, 240V~50/60Hz 20W

1-2. LOCATION OF CONTROLS



- 1 POWER switch
- 2 TIMER switch
- 3 Remote sensor\*
- 4 (eject) button
- 5 Cassette holder
- 6 TAPE OPERATION button  
AMS/BLANK SKIP and MUSIC SCAN indicators
- 7 COUNTER buttons  
RESET button/MEMORY button
- 8 Tape operation buttons and indicators  
◀ (rewind) button  
■ (stop) button  
▶ (play) button and indicator  
▶▶ (fast-forward) button  
● REC (record) button and indicator  
|| PAUSE button and indicator  
○ REC MUTE (record muting) button
- 9 BIAS (bias adjust) control
- 10 MONITOR switch
- 11 PHONES (headphones) Jack (stereo phone jack)
- 12 LEVEL (headphones level) control
- 13 REC LEVEL (recording level) control
- 14 MPX FILTER switch
- 15 DOLBY NR switch
- 16 LINEAR COUNTER and PEAK PROGRAM METERS

\* You can remotely control this cassette deck with:  
—A remote commander that has an mark and comes with a Sony amplifier or receiver and which can be used to control a cassette deck.  
—An optional Sony remote commander that has an mark.

SECTION 2  
MECHANICAL ADJUSTMENTS

PRECAUTION

- Clean the following parts with a denatured-alcohol-moistened swab:  
record/playback head pinch roller  
erase head rubber belts  
capstan idlers
- Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.

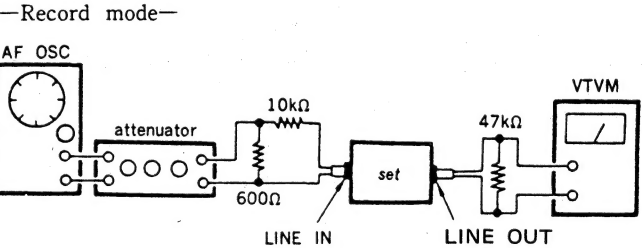
Torque Measurement

Torque	Torque meter	Meter reading
Forward	CQ-102C	30-70g•cm (0.42-0.97oz•inch)
Forward back tension	CQ-102C	2-6g•cm (0.028-0.083oz•inch)
FF/REW	CQ-201B	90-180g•cm (1.25-2.5oz•inch)

SECTION 3  
ELECTRICAL ADJUSTMENTS

- The adjustment should be performed in the publication (Be sure to make playback adjustment at first.)
- The adjustment and measurement should be performed for both L-CH and R-CH.
  - Switch position  
DOLBY NR switch: OFF  
TIMER switch: OFF

- Standard record position  
Deliver the standard input signal level to the input jack and set the REC LEVEL control to obtain the standard output signal level as follows.



• Standard Input Level

Input terminal	LINE IN
source impedance	10kΩ
input signal level	0.25V (-10dB)

• Standard Output Level

Output terminal	LINE OUT
load impedance	47kΩ
output signal level	0.44V (-5dB)

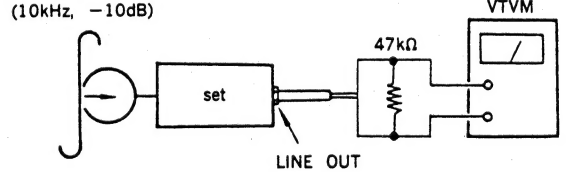
Test Tape

Tape	Contents	Use
P-4-A100	10kHz, -10dB	Record/Playback Head Azimuth Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment
P-4-L300	315Hz, 0dB	Playback Level Adjustment

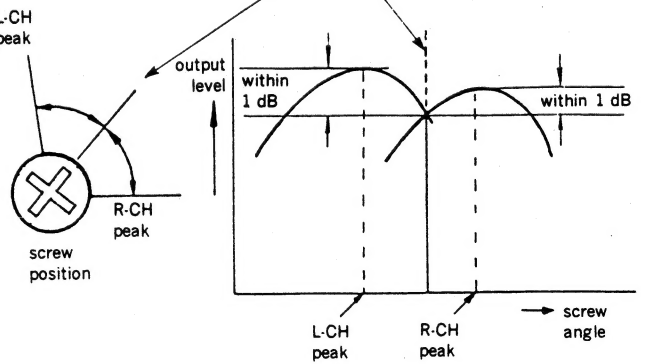
Record/Playback Head Azimuth Adjustment  
procedure:

- Playback Mode

test tape  
P-4-A100  
(10kHz, -10dB)

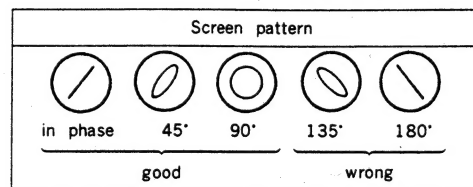
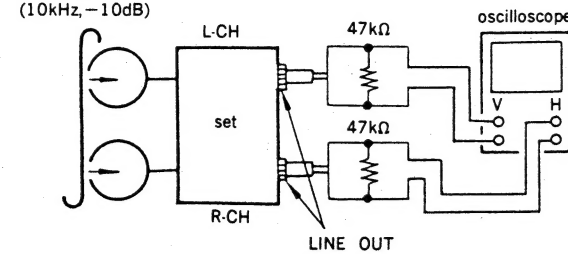


- Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 1dB.



### 3. Phase Check

Playback mode  
test tape  
P-4-A100  
(10kHz, -10dB)



4. After the adjustment, lock the adjustment screw with suitable locking compound.

Adjustment Location: —record/playback head—

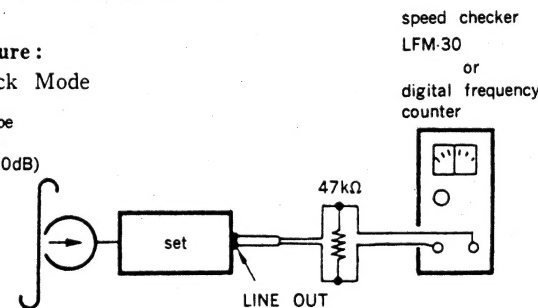


### Tape Speed Adjustment

#### Procedure:

Playback Mode

test tape  
WS-48B  
(3kHz, 0dB)



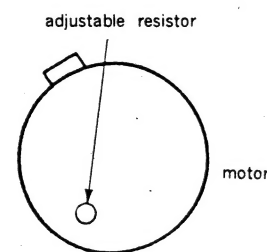
#### Specification:

Speed checker	Digital frequency counter
±0.5%	2.985—3.015Hz

Frequency difference between the beginning and the end of the tape should be within 0.08% (0.24Hz).

#### Adjustment Location:

adjustment the adjustable resistor of built in motor (adjustment by the insert to driver Speed in fastest that turn the clockwise.)

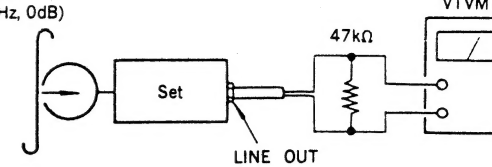


### Playback Level Adjustment

#### Procedure:

Playback mode

test tape  
P-4-L300  
(315Hz, 0dB)



#### Specification:

Adjust RV101 (L-CH), RV201 (R-CH) so that within adjustment level as follows.

LINE OUT level: 0.41 to 0.46V

(-5.5 to -4.5dB)

Level Difference between Channels: Within 0.5dB

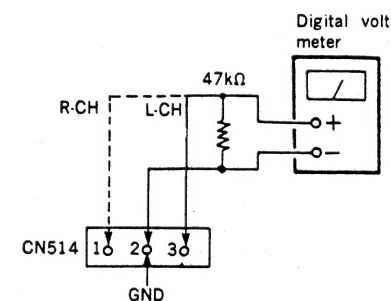
Confirm the LINE OUT level does not change in playback mode while changing the mode from playback to stop several times.

### Bias Consumption Current Adjustment

Bias Consumption current adjustment is sure to front of record bias adjustment.

Behind the bias consumption current adjustment, record bias adjustment do over again.

1. Set the center to RV152 (L-CH), RV252 (R-CH) and REC/FWD for no-signal.
2. Connect CNS14 with digital volt meter, adjust T151 (L-CH), T251 (R-CH) so that the minimum or digital volt meter.



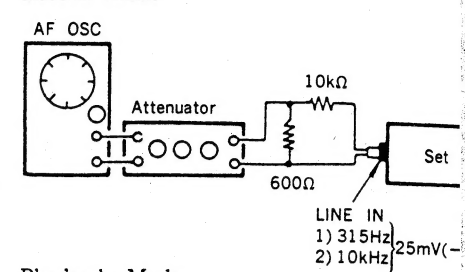
### Record Bias Adjustrent

#### Setting:

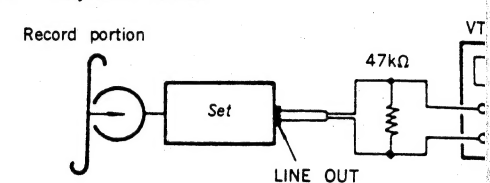
REC LEVEL knob shall be the specilied rec

#### Procedure:

1. Record Mode



2. Playback Mode



Adjust RV152 (L-CH), RV252 (R-CH) so that play 10kHz is 0.5±0.3dB.

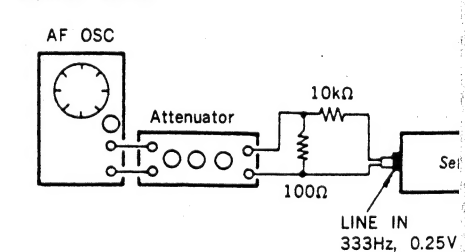
### Record Level Adjustment

#### Setting:

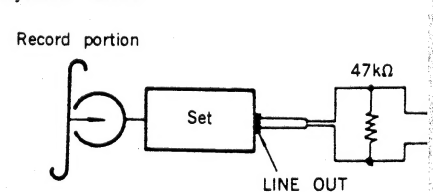
REC LEVEL knob shall be at the specified

#### Procedure:

1. Record Mode



2. Playback Mode



#### Specification:

Adjust RV151 (L-CH), RV152 (R-CH) so that wi level as follows.

LINE OUT Level: CS-122

0.42 to 0.45V

(-5.3 to -4.7dB)



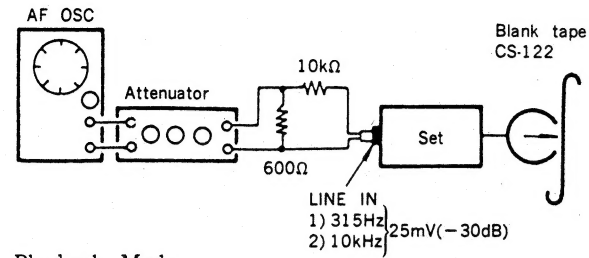
## Record Bias Adjustrent

### Setting :

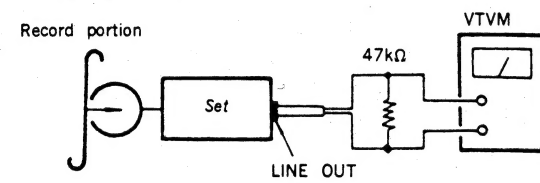
REC LEVEL knob shall be the specilied record position.

### Procedure :

#### 1. Record Mode



#### 2. Playback Mode



Adjust RV152 (L-CH), RV252 (R-CH) so that playback output of 10kHz is  $0.5 \pm 0.3$ dB.

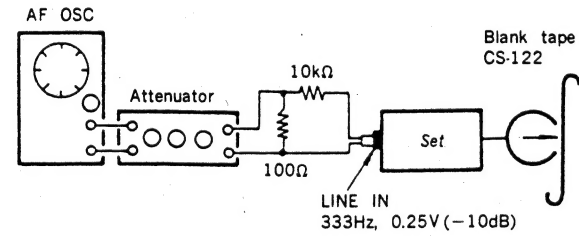
## Record Level Adjustment

### Setting :

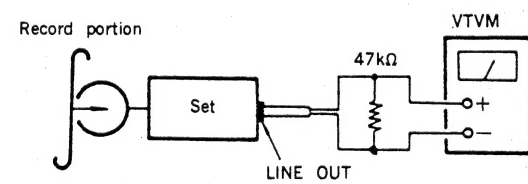
REC LEVEL knob shall be at the specified record position.

### Procedure :

#### 1. Record Mode



#### 2. Playback Mode



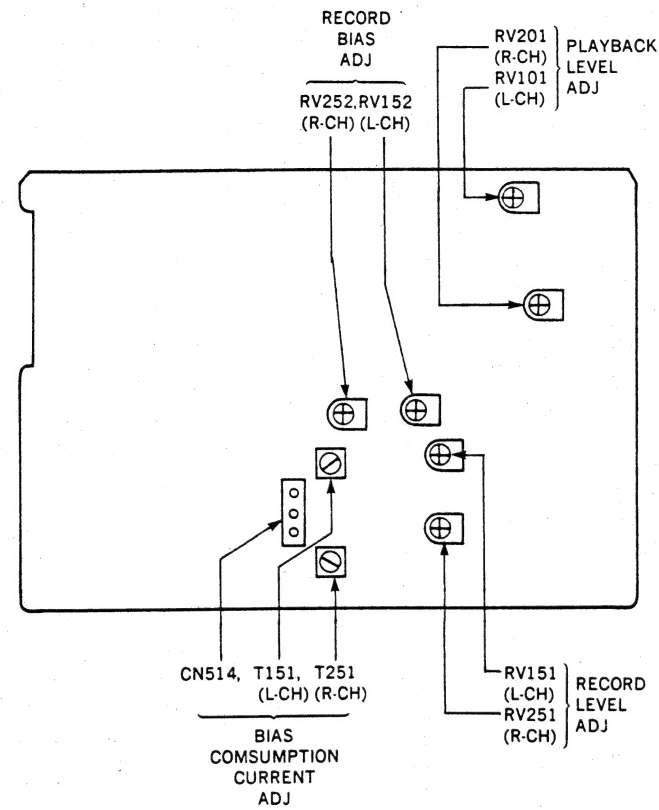
### Specification :

Adjust RV151 (L-CH), RV152 (R-CH) so that within adjustment level as follows.

LINE OUT Level: CS-122

0.42 to 0.45V  
(-5.3 to -4.7dB)

Adjustment Location : main board



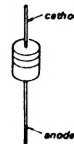
## SECTION 4 DIAGRAMS

### 4-1. SEMICONDUCTOR LEAD LAYOUTS • Semiconductor Location

DTA114ES  
DTA144ES  
DTB114ES  
DTC114ES  
DTC143TS  
DTC144ES  
2SD2144S



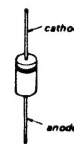
HZS6A1L  
HZS7B2L  
HZS7C1L  
HZS9C1L  
HZS12C1L



2SA1150  
2SC278S



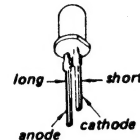
US1060M  
10E2N



2SA1409-L  
2SA733  
2SB1013  
2SC3623-L  
2SD1387



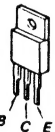
GL-5HY41



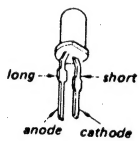
SEL1210S  
SEL1410E



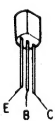
2SB1094-L  
2SD1585-L



SEL2410E-C



2SB1116



2SD774-3



Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D301	E-18	D906	E-12	Q654	F-26
D351	F-13	D907	E-12	Q655	F-26
D401	F-18			Q701	C-30
D451	F-13	IC501	C-18	Q702	B-28
D511	H-18	IC502	C-20	Q703	B-29
D512	F-12	IC511	H-19	Q704	B-29
D513	F-12	IC512	H-21	Q705	B-27
D514	F-24	IC513	G-23	Q706	B-27
D515	F-21	IC551	F-20	Q707	B-30
D516	F-21	IC552	E-18	Q708	B-30
D517	F-21	IC553	F-16	Q709	B-30
D701	C-26	IC651	E-26	Q710	B-28
D703	C-30	IC801	G-28	Q751	B-24
D704	C-29	IC802	I-26	Q752	B-24
D705	B-28	IC803	I-29	Q753	B-23
D706	B-29	JC804	H-29	Q754	B-24
D708	C-26	IC851	E-29	Q755	C-23
D709	C-26	IC901	G-8	Q756	C-24
D710	A-29	IC902	F-13	Q757	C-24
D711	C-26	IC903	G-10	Q801	E-28
D714	B-30	IC904	G-32	Q802	F-28
D715	B-26			Q803	E-28
D716	A-26	Q101	B-19	Q804	H-27
D717	B-26	Q151	G-18	Q805	H-28
D718	B-26	Q152	F-22	Q806	H-28
D751	C-23	Q201	D-29	Q807	I-28
D752	B-26	Q251	I-18	Q808	I-28
D753	B-26	Q252	I-22	Q809	I-27
D754	B-26	Q301	E-19	Q810	I-28
D755	B-26	Q401	F-19	Q811	J-28
D801	E-29	Q511	F-22	Q812	I-29
D802	H-25	Q512	F-22	Q851	E-30
D803	E-28	Q513	F-22	Q852	I-28
D804	E-28	Q514	I-22	Q901	G-7
D805	D-28	Q515	F-23	Q902	G-7
D806	C-28	Q516	F-23	Q903	G-6
D807	I-28	Q517	F-24	Q904	G-6
D808	J-28	Q518	G-24	Q905	G-7
D809	F-27	Q519	E-23	Q906	G-8
D851	H-29	Q519	E-23	Q907	G-13
D852	I-29	Q520	E-22	Q908	G-11
D901	E-9	Q521	F-22	Q909	F-12
D902	E-11	Q551	F-20	Q910	F-11
D903	E-10	Q651	E-27	Q1001	B-2
D904	F-10	Q652	E-27	Q1002	B-5
D905	F-11	Q653	E-27		

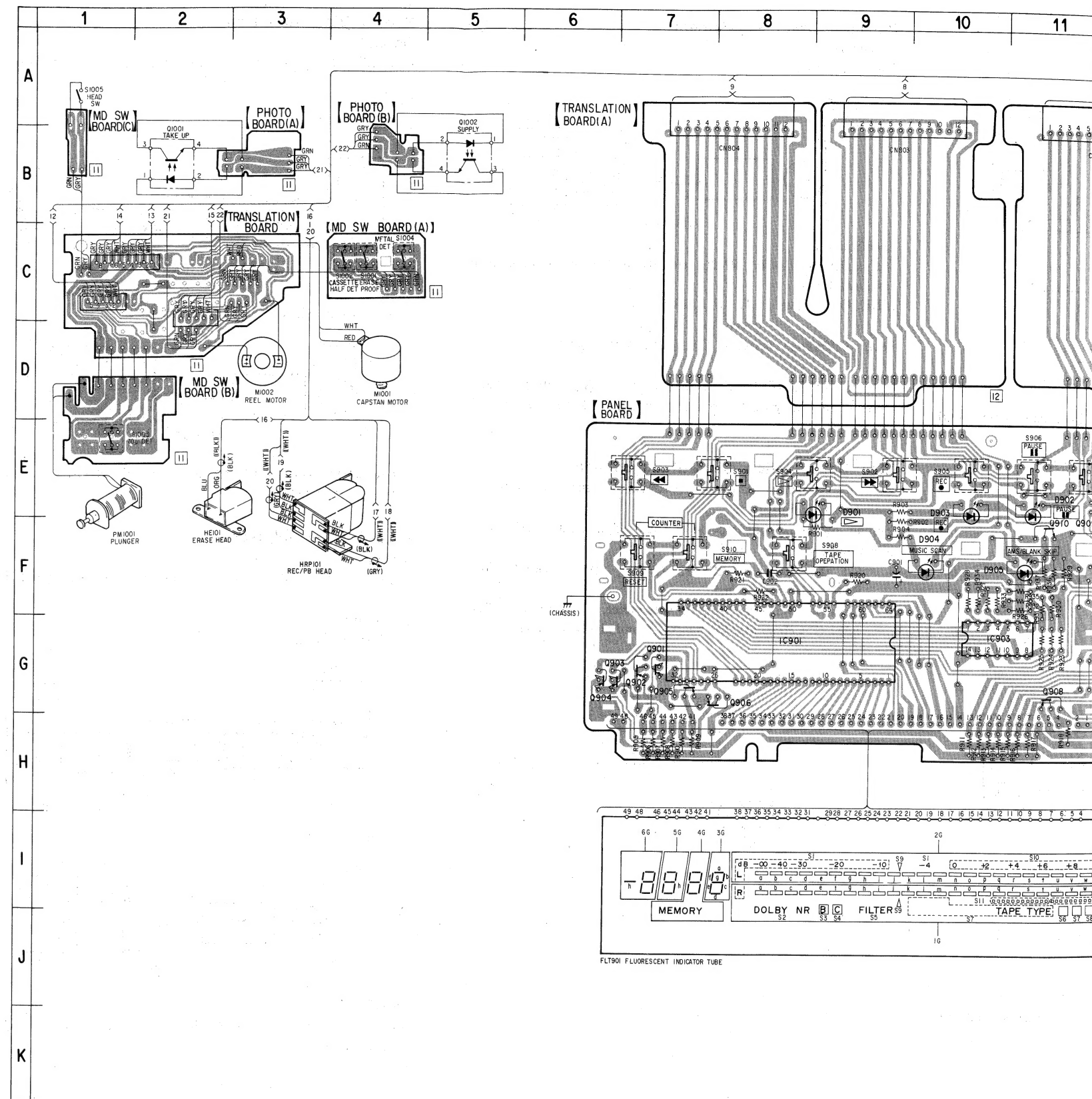
#### Note on Display Section Schematic Diagram:

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $\frac{1}{4}\text{W}$  or less unless otherwise specified.
- % : indicates tolerance.
- $\Delta$  : internal component.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark: PLAY
- Voltages are taken with a VOM (Input impedance  $10\text{M}\Omega$ ). Voltage variations may be noted due to normal production tolerances.

#### Note on Printed Wiring Boards:

- $\circ$  : parts extracted from the component side.
- $\square$  : indicates side identified with part number.

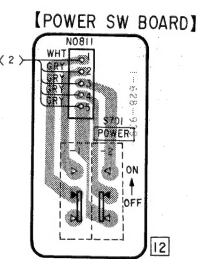
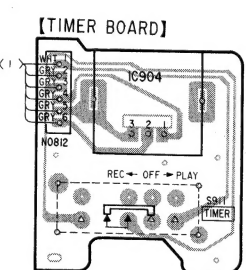
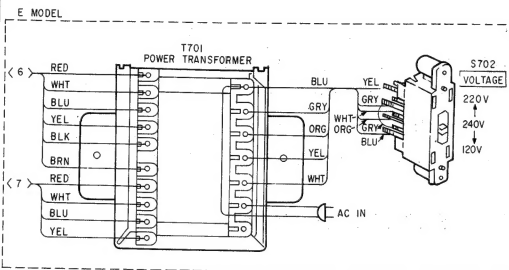
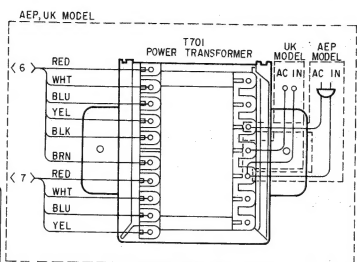
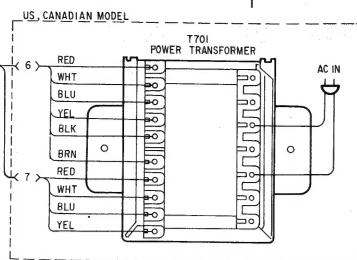
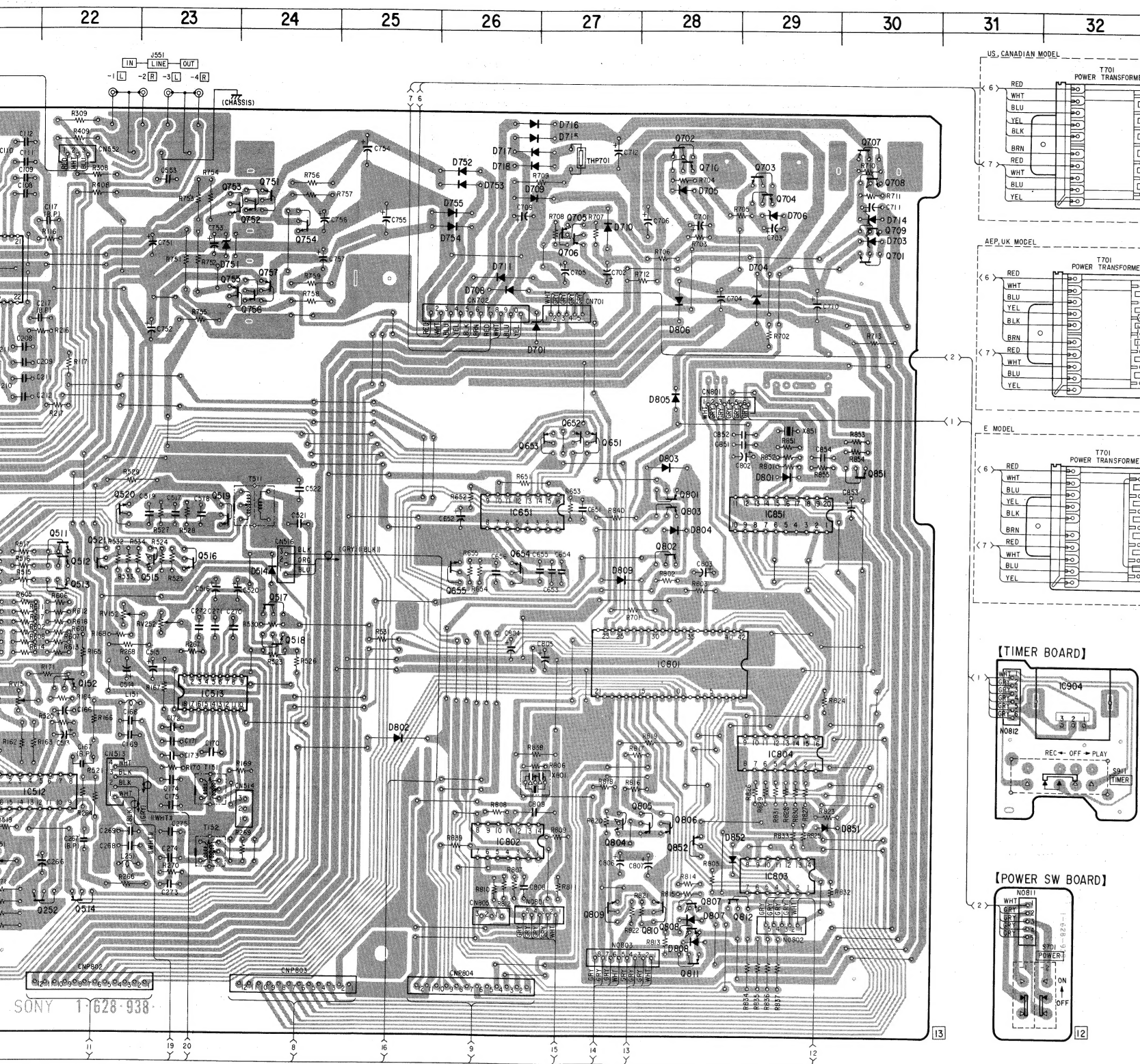
### 4-2. PRINTED WIRING BOARDS



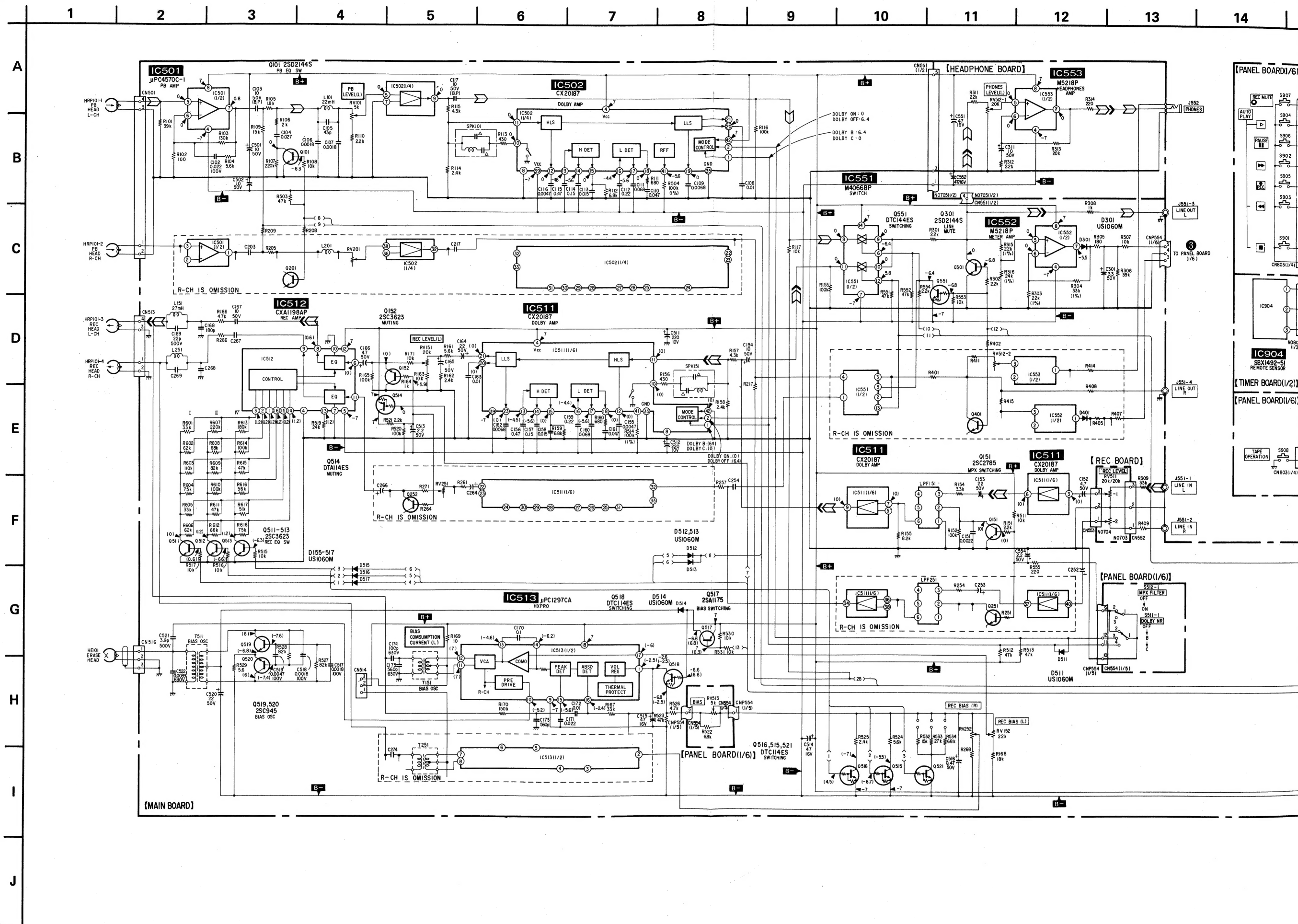




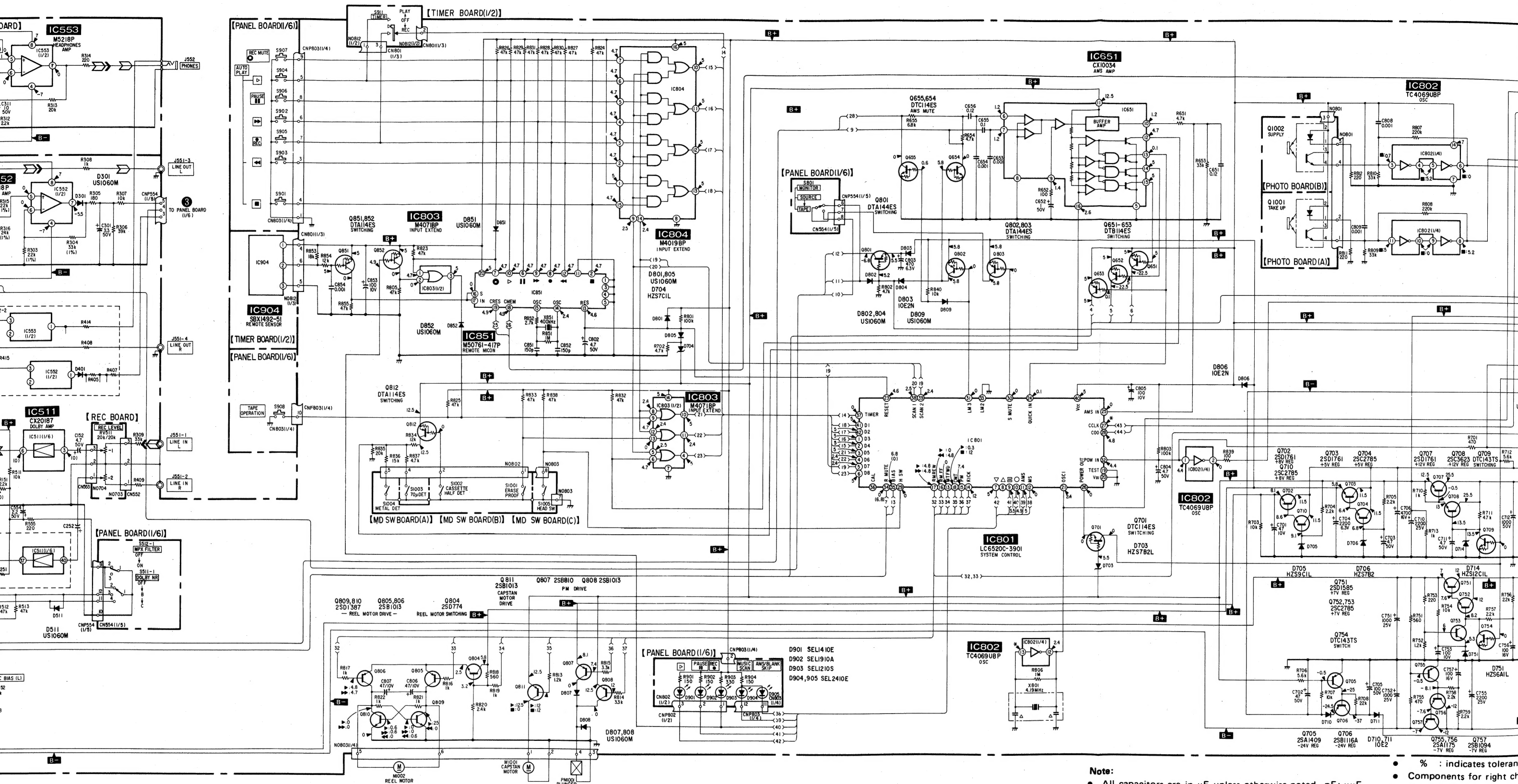




# 4-3. AUDIO/SYSTEM CONTROL SECTION SCHEMATIC DIAGRAM



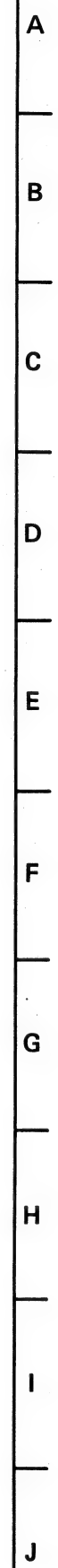






**Note:**

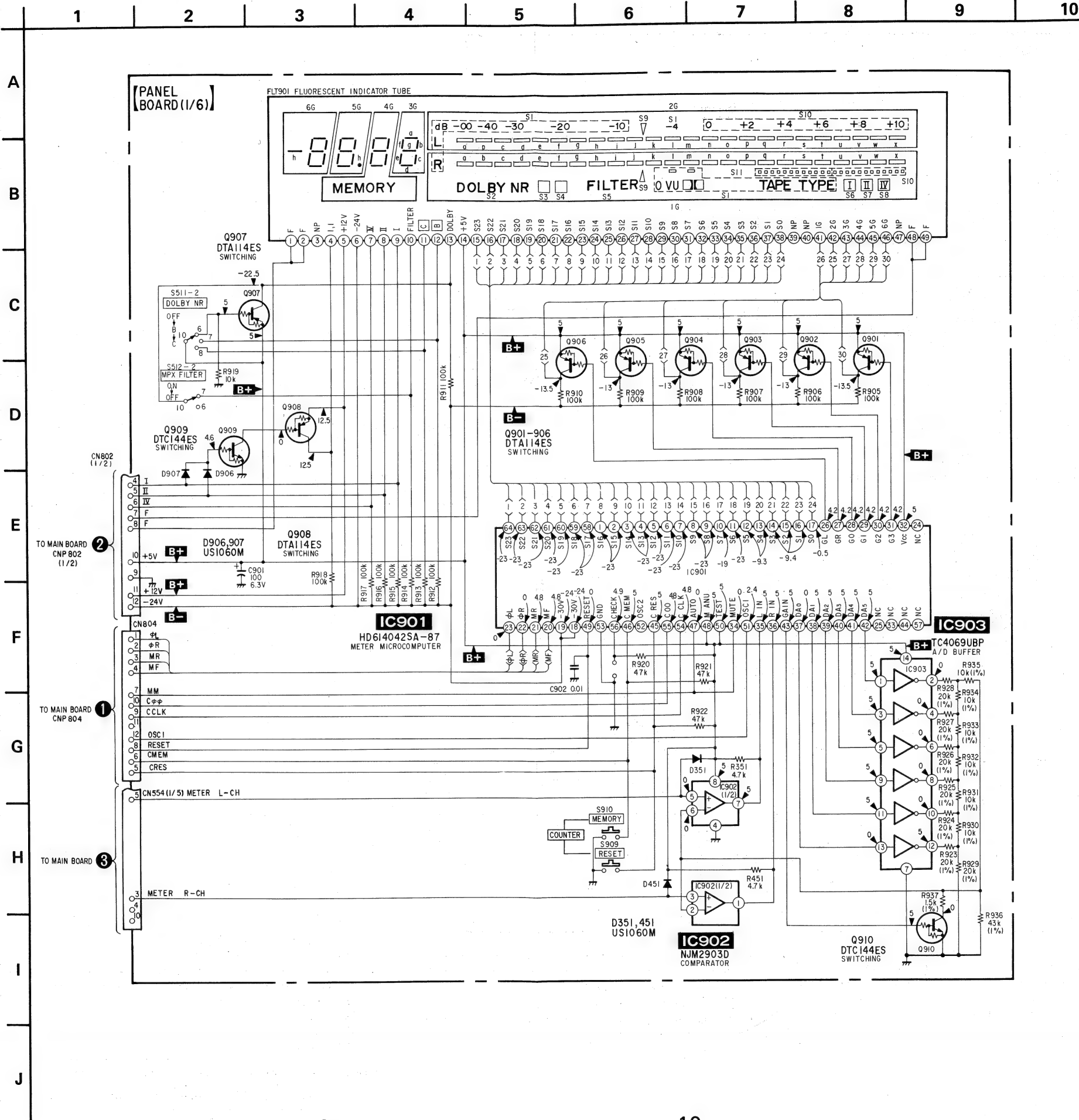
- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $\frac{1}{4}\text{W}$  or less unless otherwise specified.

- % : indicates tolerance
- Components for right channel. Reference number
- $\square$  : internal component
- $\triangle$  : adjustment for
- Voltage and waveforms under no-signal condition
- no mark : PLAY
- ( ) : REC



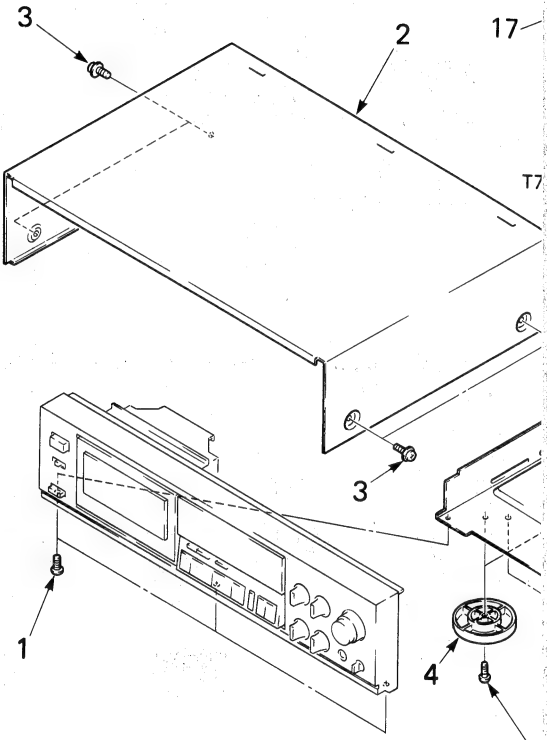
**Note:** The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

4.4. DISPLAY SECTION SCHEMATIC DIAGRAM • See page 9 for notes.



- NOTE:**
- The mechanical parts with no reference number in the exploded views are not supplied.
  - The construction parts of an assembled part are indicated with a collation number in the remark column.
  - Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

(1) CABINET SECTION





No.	Part No.	Description
1	3-703-685-21	SCREW (+BV 3X8)
2	3-350-407-41	CASE
3	3-704-366-01	SCREW (CASE) (M3X8)
4	X-4885-935-1 X-4911-201-1	(K630ES)...FOOT ASSY (K630).....FOOT ASSY
5	7-682-548-04	SCREW +BVTT 3X8 (S)
6	*3-669-610-00	SPACER
7	*3-346-265-11	HOLDER, PC BOARD
8	*4-924-098-11	HOLDER, PC BOARD
9	7-682-547-04	SCREW +BVTT 3X6 (S)
10	*3-309-144-21	HEAT SINK
11	4-870-539-00	PLATE, GROUND
12	*4-363-146-21	HEAT SINK, V.OUT
13	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT
14	*3-350-406-21 *3-350-406-31 *3-350-406-41 *3-350-406-51 *3-350-406-71	(AEP)....PANEL, BACK (US).....PANEL, BACK (UK)....PANEL, BACK (E).....PANEL, BACK (K630)....PANEL, BACK


## SECTION 5 EXPLODED VIEWS

### NOTE:

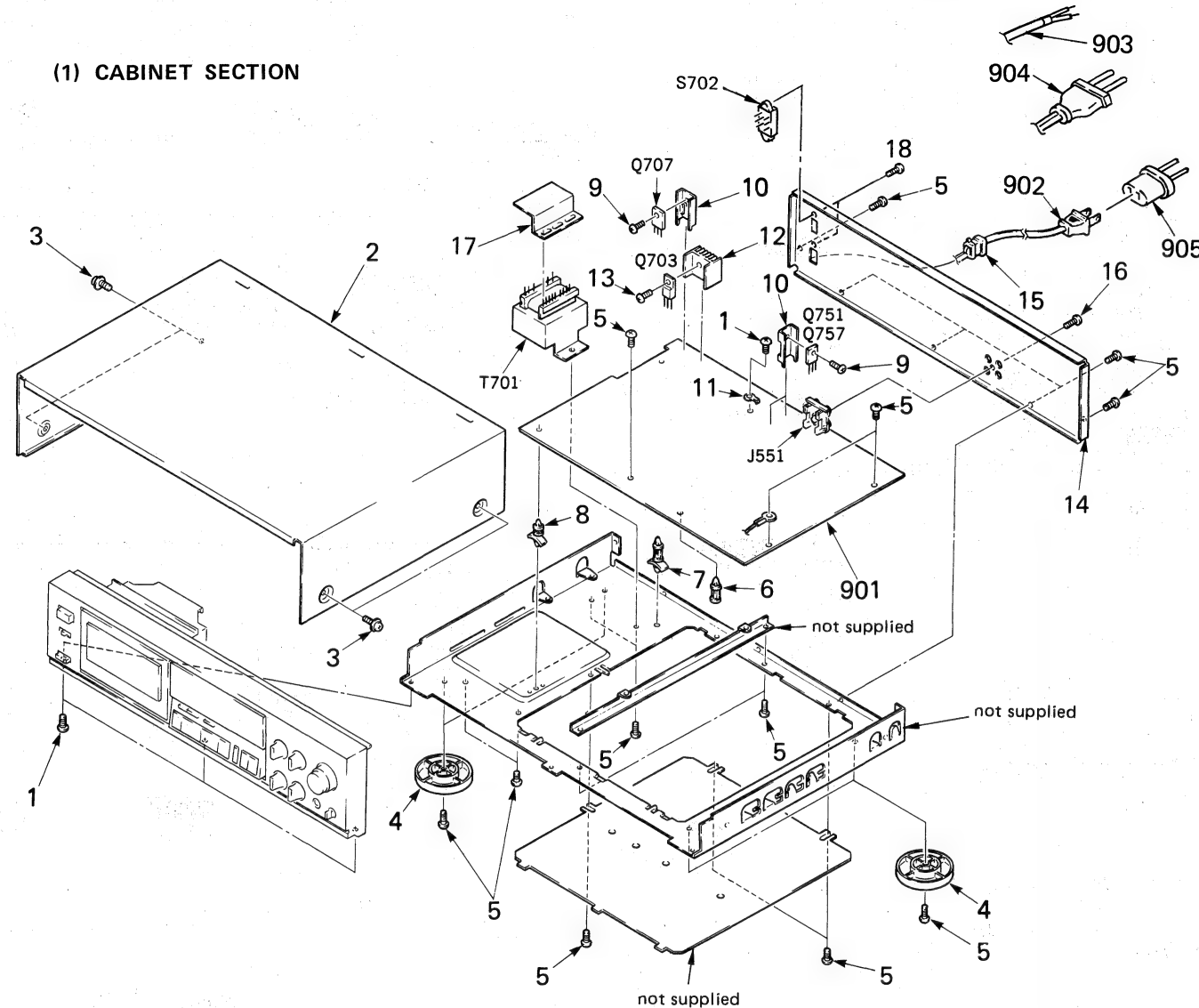
- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.










- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts  
Example:  
(RED) ... KNOB, BALANCE (WHITE)  
↑ Cabinet's Color      ↑ Parts' Color

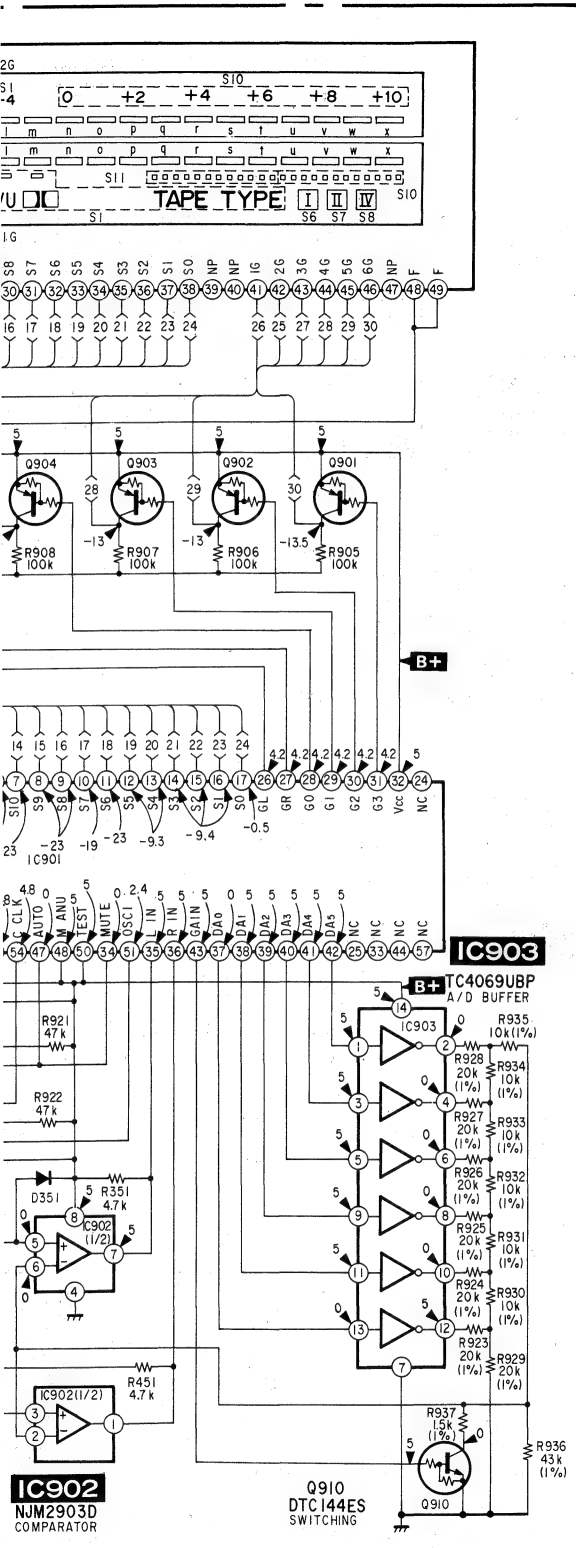
The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

### (1) CABINET SECTION

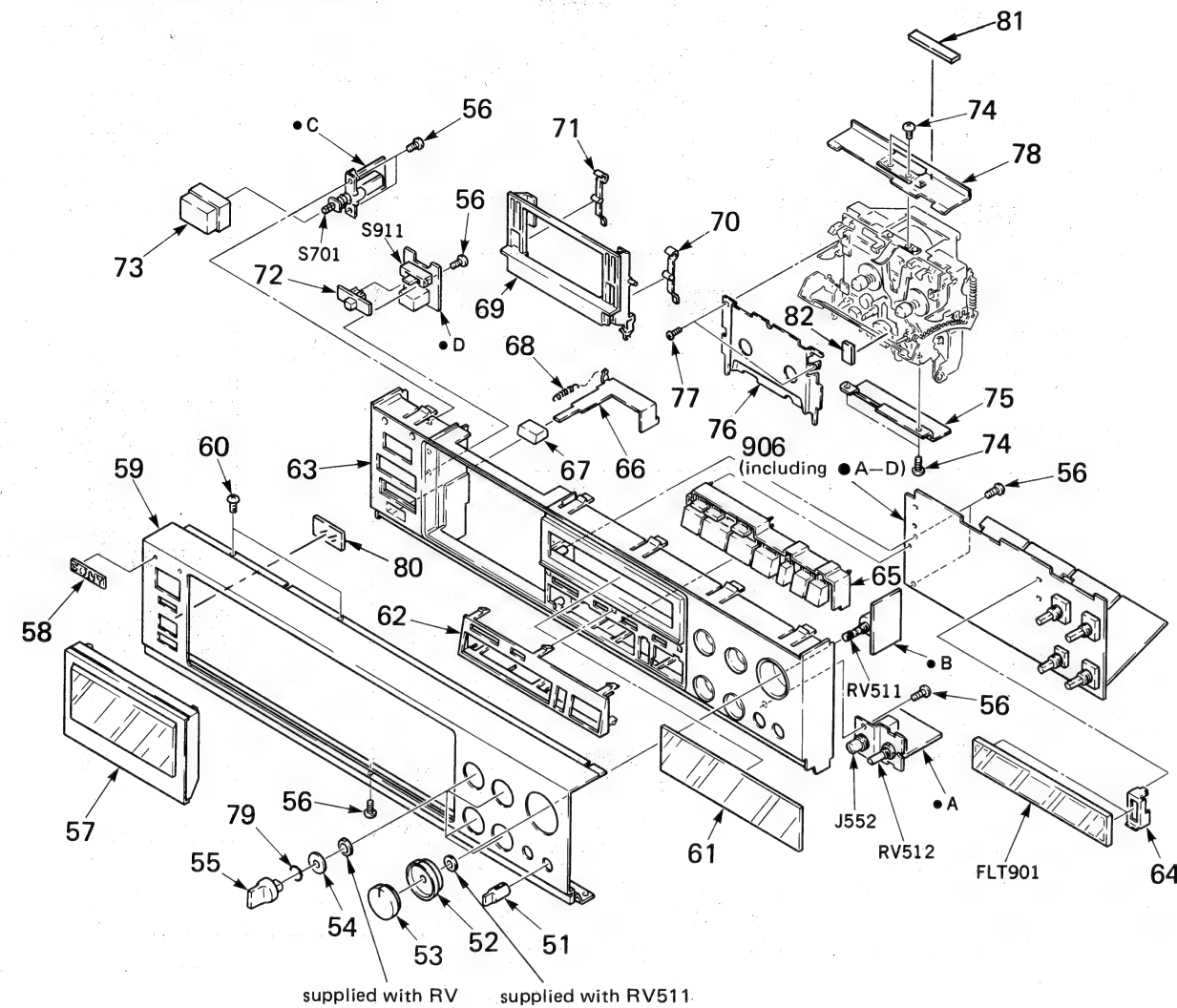


No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	3-703-685-21	SCREW (+BV 3X8)		15	*3-703-244-00 *3-703-571-11	(US,AEP,UK,K630)...BUSHING (2104), CORD (E).....BUSHING (S)(4516), CORD	
2	3-350-407-41	CASE		16	7-621-849-00	SCREW, TAPPING	
3	3-704-366-01	SCREW (CASE) (M3X8)		17	*3-337-136-01	COVER, TRANSFORMER SAFETY	
4	X-4885-935-1 X-4911-201-1	(K630ES)...FOOT ASSY (K630)....FOOT ASSY		18	7-685-646-79	(E)...SCREW +BVTP 3X8 TYPE2 N-S	
5	7-682-548-04	SCREW +BVTT 3X8 (S)		901	*A-2056-440-A	MOUNTED PCB, MAIN	
6	*3-669-610-00	SPACER		902	 .1-551-188-XX  .1-555-465-00	(E).....CORD, POWER (US,K630)...CORD, POWER	
7	*3-346-265-11	HOLDER, PC BOARD		903	 .1-551-884-32	(UK)....CORD, POWER	
8	*4-924-098-11	HOLDER, PC BOARD		904	 .1-555-795-00	(AEP)...CORD, POWER, EULO PLUG	
9	7-682-547-04	SCREW +BVTT 3X6 (S)		905	 .1-526-565-00	(E)...AC PLUG ADAPTOR	
10	*3-309-144-21	HEAT SINK		S702	 .1-570-307-11	(E)...SWITCH, VOLTAGE CHANGE	
11	4-870-539-00	PLATE, GROUND		T701	 .1-449-484-11	(AEP,UK)....TRANSFORMER, POWER	
12	*4-363-146-21	HEAT SINK, V.OUT		T701	 .1-449-575-11	(E).....TRANSFORMER, POWER	
13	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3		T701	 .1-449-576-11	(US,K630)...TRANSFORMER, POWER	
14	*3-350-406-21 *3-350-406-31 *3-350-406-41 *3-350-406-51 *3-350-406-71	(AEP)....PANEL, BACK (US)....PANEL, BACK (UK)....PANEL, BACK (E)....PANEL, BACK (K630)...PANEL, BACK					





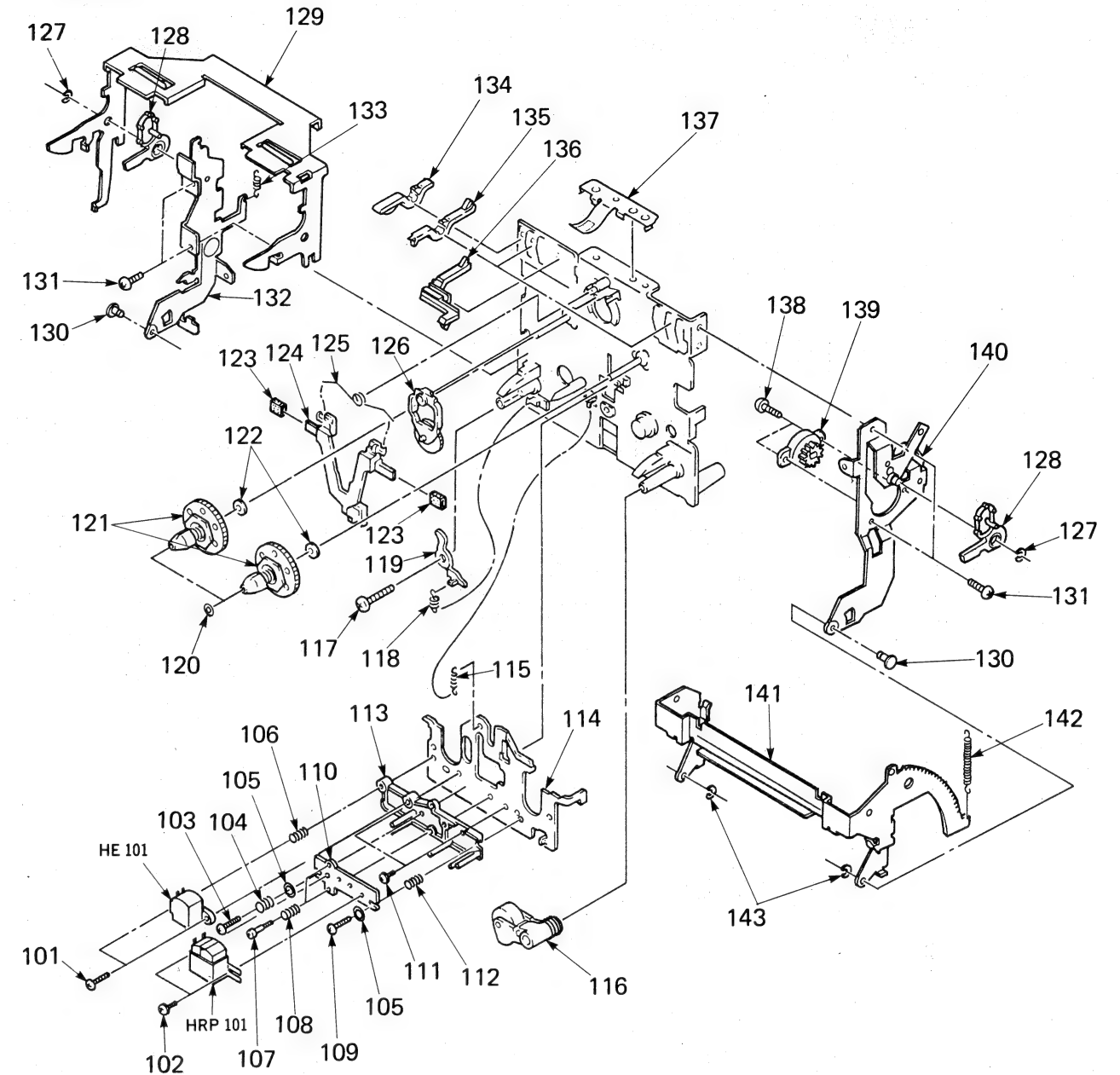
## (2) FRONT PANEL SECTION



No.	Part No.	Description	Remarks
51	4-921-921-11	KNOB (M)	
52	3-332-589-01	KNOB (REC VOL-LEFT)	
53	3-332-590-01	KNOB (REC VOL-RIGHT)	
54	3-350-416-01	SPACER	
55	4-908-097-21	KNOB	
56	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
57	A-2169-137-A	LID ASSY, CASSETTE	
58	4-908-848-01	(K630ES)...EMBLEM, SONY	
	4-925-334-11	(K630).....EMBLEM (5-A), SONY	
59	3-350-404-31	(US).....PANEL, FRONT	
	3-350-404-41	(AEP,UK).....PANEL, FRONT	
	3-350-404-51	(E).....PANEL, FRONT	
	3-350-404-81	(K630).....PANEL, FRONT	
60	7-685-873-01	SCREW +BVTT 3X8 (S)	
61	3-318-698-01	WINDOW (M)	
62	X-3304-941-1	PLATE (B) ASSY, ORNAMENTAL	
63	3-350-405-01	PANEL (BASE)	
64	*3-318-695-01	HOLDER (FL)	

No.	Part No.	Description	Remarks
65	X-3304-939-1	BUTTON ASSY	
66	*3-332-564-01	SLIDER (EJC)	
67	3-343-698-11	BUTTON (EJECT)	
68	3-571-829-00	SPRING, TENSION	
69	X-3332-448-1	HOLDER ASSY, CASSETTE	
70	3-307-372-00	SPRING (RIGHT)	
71	3-307-371-00	SPRING (LEFT)	
72	3-307-538-21	KNOB, SWITCH, TIMER	
73	4-917-460-01	KNOB, POWER	
74	7-682-547-04	SCREW +BVTT 3X6 (S)	
75	*3-332-560-01	BRACKET (MDB)	
76	*3-332-547-01	PLATE, ORNAMENTAL	
77	7-621-772-00	SCREW +B 2X3	
78	*3-332-561-01	BRACKET (MDU)	
79	3-350-426-01	SPRING	
80	3-712-704-11	PLATE (SMALL), TRANSPARENT	
81	*4-913-199-01	CUSHION (D), CHASSIS	
82	*4-917-633-01	DAMPER (B)	
906	*A-2056-441-A	MOUNTED PCB, PANEL	

## (3) MECHANISM SECTION (1) (TCM-CMAY B-27)



No.	Part No.	Description	Remarks
101	7-621-955-75	SCREW, TOTSU PMH 2X12	
102	7-621-255-15	SCREW +P 2X3	
103	3-392-718-01	SCREW (M2X12) (SPECIAL), BIND	
104	3-392-716-01	SPRING (LEFT)	
105	7-688-001-01	W 2, SMALL	
106	3-391-101-01	SPRING	
107	3-392-719-01	SCREW, TILT	
108	3-392-715-01	SPRING	
109	7-621-255-55	SCREW +P 2X8	
110	*3-392-714-01	SPACER, 3 HEAD	
111	3-392-734-01	SCREW (2.0X3) (ZNT), O PAN	
112	3-392-717-01	SPRING (RIGHT)	
113	*3-392-713-01	PLATE, BASE, HEAD	
114	*3-392-712-01	BASE, HEAD	
115	3-391-114-01	SPRING	
116	3-392-731-01	PINCH ROLLER (R) ASSY	
117	3-392-733-01	SCREW	
118	3-391-123-01	SPRING (A)	
119	3-391-105-01	ARM (B), EJECT SAFETY	
120	3-701-436-11	WASHER, 1.6 POLYETHYLENE	
121	X-3391-107-1	REEL ASSY, T.U	
122	3-392-711-01	WASHER (2.1X0.25) (T)	
123	3-392-728-01	RUBBER, BRAKE	

No.	Part No.	Description	Remarks
124	3-392-723-01	LEVER (B), HOLD	
125	3-391-124-01	SPRING	
126	X-3391-111-1	IDLER ASSY	
127	7-624-105-04	STOP RING 2.3, TYPE -E	
128	3-391-185-01	LEVER, STOP	
129	*3-391-180-01	ARM, EJECT	
130	3-391-183-01	SHAFT (B), HOLDER FULCRUM	
131	7-621-773-86	SCREW +PTT 2.6X4 (S)	
132	*X-3391-152-1	ARM ASSY, EJECT	
133	3-391-181-01	SP, LEVER RETURN	
134	3-392-725-01	LEVER	
135	3-392-724-01	LEVER	
136	3-392-726-01	LEVER	
137	3-391-177-01	SPRING	
138	7-621-255-15	SCREW +PTT 2X3 (S)	
139	X-3391-151-1	DAMPER ASSY	
140	*3-392-722-01	PLATE HOLD BLK	
141	*3-391-182-01	HOLDER, CASSETTE	
142	3-391-184-01	SPRING	
143	7-624-102-04	STOP RING 1.5, TYPE -E	
HE101	1-543-375-11	HEAD, ERASE (EF-701-36)	
HRP101	1-543-593-11	HEAD, MAGNETIC (REC/PB)	





## SECTION 6

### ELECTRICAL PARTS LIST

**NOTE:**

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

**CAPACITORS:**MF:  $\mu$ F, PF:  $\mu$ F.**RESISTORS**

- All resistors are in ohms.
- F: nonflammable

**COILS**

- MMH: mH, UH:  $\mu$ H

**SEMICONDUCTORS**In each case, U:  $\mu$ , for example:UA....:  $\mu$ A...., UPA....:  $\mu$ PA....,UPC....:  $\mu$ PC, UPD....:  $\mu$ PD....

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
901	*A-2056-440-A	MOUNTED PCB, MAIN	C174	1-136-433-11	FILM 100PF 5% 630V
902	$\Delta$ 1-551-188-XX	(E).....CORD, POWER	C175	1-136-803-11	FILM 560PF 5% 630V
	$\Delta$ 1-555-465-00	(US,K630)....CORD, POWER	C301	1-123-382-00	ELECT 3.3MF 20% 50V
903	$\Delta$ 1-551-884-32	(UK)....CORD, POWER	C311	1-123-875-11	ELECT 10MF 20% 50V
904	$\Delta$ 1-555-795-00	(AEP)....CORD, POWER, EULO PLUG	C501	1-123-875-11	ELECT 10MF 20% 50V
905	$\Delta$ 1-526-565-00	(E)....AC PLUG ADAPTOR	C502	1-123-875-11	ELECT 10MF 20% 50V
906	*A-2056-441-A	MOUNTED PCB, PANEL	C511	1-126-176-11	ELECT 220MF 20% 10V
C102	1-130-973-00	FILM 0.022MF 5% 100V	C512	1-126-176-11	ELECT 220MF 20% 10V
C103	1-124-657-00	ELECT 10MF 20% 50V	C513	1-124-925-11	ELECT 2.2MF 20% 50V
C104	1-130-488-00	MYLAR 0.027MF 5% 50V	C514	1-124-477-11	ELECT 47MF 20% 16V
C105	1-102-966-00	CERAMIC 43PF 5% 50V	C515	1-124-477-11	ELECT 47MF 20% 16V
C106	1-130-474-00	MYLAR 0.0018MF 5% 50V	C516	1-124-902-00	ELECT 0.47MF 20% 50V
C107	1-130-474-00	MYLAR 0.0018MF 5% 50V	C517	1-136-253-11	FILM 0.0018MF 5% 100V
C108	1-136-153-00	FILM 0.01MF 5% 50V	C518	1-136-253-11	FILM 0.0018MF 5% 100V
C109	1-130-481-00	MYLAR 0.0068MF 5% 50V	C519	1-136-233-11	FILM 0.0047MF 5% 100V
C110	1-136-161-00	FILM 0.047MF 5% 50V	C520	1-126-233-11	ELECT 22MF 20% 50V
C111	1-136-163-00	FILM 0.068MF 5% 50V	C521	1-107-045-00	MICA 3.9PF 0.5PF 500V
C112	1-136-169-00	FILM 0.22MF 5% 50V	C522	1-136-558-11	FILM 0.0039MF 5% 630V
C113	1-136-155-00	FILM 0.015MF 5% 50V	C551	1-124-477-11	ELECT 47MF 20% 16V
C114	1-136-167-00	FILM 0.15MF 5% 50V	C552	1-124-477-11	ELECT 47MF 20% 16V
C115	1-136-173-00	FILM 0.47MF 5% 50V	C553	1-130-487-00	MYLAR 0.022MF 5% 50V
C116	1-130-479-00	MYLAR 0.0047MF 5% 50V	C554	1-124-925-11	ELECT 2.2MF 20% 50V
C117	1-124-657-00	ELECT 10MF 20% 50V	C651	1-136-166-00	FILM 0.12MF 5% 50V
C151	1-130-475-00	MYLAR 0.0022MF 5% 50V	C652	1-124-499-11	ELECT 1MF 20% 50V
C152	1-124-927-11	ELECT 4.7MF 20% 50V	C653	1-162-294-31	CERAMIC 0.001MF 10% 50V
C153	1-126-233-11	ELECT 22MF 20% 50V	C654	1-162-294-31	CERAMIC 0.001MF 10% 50V
C154	1-124-657-00	ELECT 10MF 20% 50V	C655	1-136-165-00	FILM 0.1MF 5% 50V
C155	1-130-479-00	MYLAR 0.0047MF 5% 50V	C656	1-136-166-00	FILM 0.12MF 5% 50V
C156	1-136-173-00	FILM 0.47MF 5% 50V	C701	1-124-446-11	ELECT 47MF 20% 10V
C157	1-136-167-00	FILM 0.15MF 5% 50V	C702	1-124-910-11	ELECT 47MF 20% 50V
C158	1-136-155-00	FILM 0.015MF 5% 50V	C703	1-124-927-11	ELECT 4.7MF 20% 50V
C159	1-136-169-00	FILM 0.22MF 5% 50V	C704	1-124-893-11	ELECT 2200MF 20% 6.3V
C160	1-136-163-00	FILM 0.068MF 5% 50V	C705	1-124-122-11	ELECT 100MF 20% 50V
C161	1-136-161-00	FILM 0.047MF 5% 50V	C706	1-124-898-11	ELECT 4700MF 20% 16V
C162	1-130-481-00	MYLAR 0.0068MF 5% 50V	C709	1-124-927-11	ELECT 4.7MF 20% 50V
C163	1-136-153-00	FILM 0.01MF 5% 50V	C710	1-124-563-11	ELECT 2200MF 20% 25V
C164	1-126-233-11	ELECT 22MF 20% 50V	C711	1-124-927-11	ELECT 4.7MF 20% 50V
C165	1-124-499-11	ELECT 1MF 20% 50V	C712	1-124-637-11	ELECT 1000MF 20% 50V
C166	1-124-927-11	ELECT 4.7MF 20% 50V	C751	1-124-557-11	ELECT 1000MF 20% 25V
C167	1-124-657-00	ELECT 10MF 20% 50V	C752	1-124-557-11	ELECT 1000MF 20% 25V
C168	1-162-285-31	CERAMIC 180PF 10% 50V	C753	1-124-443-00	ELECT 100MF 20% 10V
C169	1-107-210-00	MICA 22PF 5% 500V	C754	1-124-563-11	ELECT 2200MF 20% 25V
C170	1-136-165-00	FILM 0.1MF 5% 50V	C755	1-124-563-11	ELECT 2200MF 20% 25V
C171	1-136-157-00	FILM 0.022MF 5% 50V	C756	1-126-101-11	ELECT 100MF 20% 16V
C172	1-136-153-00	FILM 0.01MF 5% 50V	C757	1-126-101-11	ELECT 100MF 20% 16V
C173	1-130-468-00	MYLAR 560PF 5% 50V			

Ref.No.	Part No.	Description			
C802	1-124-927-11	ELECT	4.7MF	20%	50V
C803	1-124-472-11	ELECT	470MF	20%	6.3V
C804	1-124-927-11	ELECT	4.7MF	20%	50V
C805	1-124-443-00	ELECT	100MF	20%	10V
C806	1-124-446-11	ELECT	47MF	20%	10V
C807	1-124-446-11	ELECT	47MF	20%	10V
C808	1-162-294-31	CERAMIC	0.001MF	10%	50V
C809	1-162-294-31	CERAMIC	0.001MF	10%	50V
C851	1-162-284-31	CERAMIC	150PF	10%	50V
C852	1-162-284-31	CERAMIC	150PF	10%	50V
C853	1-124-443-00	ELECT	100MF	20%	10V
C854	1-162-294-31	CERAMIC	0.001MF	10%	50V
C901	1-126-177-11	ELECT	100MF	20%	6.3V
C902	1-161-379-00	CERAMIC	0.01MF	30%	16V
CN501	*1-564-507-11	PLUG, CONNECTOR 4P			
CN513	*1-564-507-11	PLUG, CONNECTOR 4P			
CN514	*1-564-506-11	PLUG, CONNECTOR 3P			
CN516	*1-564-506-11	PLUG, CONNECTOR 3P			
CN551	*1-564-508-11	PLUG, CONNECTOR 5P			
CN552	*1-564-506-11	PLUG, CONNECTOR 3P			
CN553	*1-564-506-11	PLUG, CONNECTOR 3P			
CN554	*1-566-827-11	SOCKET, CONNECTOR 12P			
CN701	*1-564-339-00	PIN, CONNECTOR 5P			
CN702	*1-564-513-11	PLUG, CONNECTOR 10P			
CN801	*1-564-340-00	PIN, CONNECTOR 6P			
CN802	*1-566-827-11	SOCKET, CONNECTOR 12P			
CN803	*1-566-827-11	SOCKET, CONNECTOR 12P			
CN804	*1-566-827-11	SOCKET, CONNECTOR 12P			
CN805	*1-564-506-11	PLUG, CONNECTOR 3P			
CNP554	*1-566-826-11	PLUG, CONNECTOR 12P			
CNP802	*1-566-826-11	PLUG, CONNECTOR 12P			
CNP803	*1-566-826-11	PLUG, CONNECTOR 12P			
CNP804	*1-566-826-11	PLUG, CONNECTOR 12P			
D301	8-719-000-26	DIODE US1060M			
D351	8-719-000-26	DIODE US1060M			
D401	8-719-000-26	DIODE US1060M			
D451	8-719-000-26	DIODE US1060M			
D511	8-719-000-26	DIODE US1060M			
D512	8-719-000-26	DIODE US1060M			
D513	8-719-000-26	DIODE US1060M			
D514	8-719-000-26	DIODE US1060M			
D515	8-719-000-26	DIODE US1060M			
D516	8-719-000-26	DIODE US1060M			
D517	8-719-000-26	DIODE US1060M			
D701	8-719-933-49	DIODE HZS7C1L			
D703	8-719-933-47	DIODE HZS7B2L			
D704	8-719-933-49	DIODE HZS7C1L			
D705	8-719-933-59	DIODE HZS9C1L			
D706	8-719-933-47	DIODE HZS7B2L			
D708	8-719-000-26	DIODE US1060M			
D709	8-719-200-77	DIODE 10E2N			
D710	8-719-200-77	DIODE 10E2N			
D711	8-719-200-77	DIODE 10E2N			
D714	8-719-933-79	DIODE HZS12C1L			
D715	8-719-200-77	DIODE 10E2N			
D716	8-719-200-77	DIODE 10E2N			
D717	8-719-200-77	DIODE 10E2N			

Ref.No.	Part No.	Description		
D718	8-719-200-77	DIODE 10E2N		
D751	8-719-933-33	DIODE HZS6A1L		
D752	8-719-200-77	DIODE 10E2N		
D753	8-719-200-77	DIODE 10E2N		
D754	8-719-200-77	DIODE 10E2N		
D755	8-719-200-77	DIODE 10E2N		
D801	8-719-000-26	DIODE US1060M		
D802	8-719-000-26	DIODE US1060M		
D803	8-719-200-77	DIODE 10E2N		
D804	8-719-000-26	DIODE US1060M		
D805	8-719-000-26	DIODE US1060M		
D806	8-719-200-77	DIODE 10E2N		
D807	8-719-000-26	DIODE US1060M		
D808	8-719-000-26	DIODE US1060M		
D809	8-719-000-26	DIODE US1060M		
D851	8-719-000-26	DIODE US1060M		
D852	8-719-000-26	DIODE US1060M		
D901	8-719-302-52	DIODE SEL1410E		
D902	8-719-941-46	DIODE GL-5HY41		
D903	8-719-302-45	DIODE SEL1210S		
D904	8-719-301-43	DIODE SEL2410E-C		
D905	8-719-301-43	DIODE SEL2410E-C		
D906	8-719-000-26	DIODE US1060M		
D907	8-719-000-26	DIODE US1060M		
FLT901	1-519-491-11	INDICATOR TUBE, FLUORESCENT		
HE101	1-543-375-11	HEAD, ERASE (EF-701-36)		
HRP101	1-543-593-11	HEAD, MAGNETIC (REC/PB)		
IC501	8-759-111-44	IC UPC4570C-1		
IC502	8-752-018-70	IC CX20187		
IC511	8-752-018-70	IC CX20187		
IC512	8-752-033-61	IC CXA1198AP		
IC513	8-759-106-56	IC UPC1297CA		
IC551	8-759-601-43	IC M4066BP		
IC552	8-759-945-58	IC RC4558P		
IC553	8-759-601-02	IC M5218P		
IC551	8-759-700-46	IC CX10034		
IC801	8-759-821-29	IC LC6520C-3901		
IC802	8-759-240-69	IC TC4069UBP		
IC803	8-759-240-71	IC TC4071BP		
IC804	8-759-601-19	IC M4019BP		
IC851	8-759-604-07	IC M50761-423P		
IC901	8-759-302-98	IC HD614042SA87		
IC902	8-759-928-03	IC NJM2903D		
IC903	8-759-240-69	IC TC4069UBP		
IC904	8-749-901-49	IC SBX1492-51		
J551	1-565-258-11	JACK, PIN 4P (LINE IN/OUT)		
J552	1-507-796-71	JACK (PHONES)		
L101	1-410-779-21	INDUCTOR	22MMH	
L151	1-410-780-11	INDUCTOR	27MMH	
L201	1-410-779-21	INDUCTOR	22MMH	
L251	1-410-780-11	INDUCTOR	27MMH	
LPF151	1-235-980-11	FILTER, LOW PASS		
LPF251	1-235-980-11	FILTER, LOW PASS		
M1001	X-3391-130-1	MOTOR ASSY		
M1002	3-392-709-01	MTR REEL BLK		

# TC-K630/K630ES

Ref.No.	Part No.	Description
PM1001	1-454-440-21	SOLENOID, PLUNGER
Q101	8-729-922-37	TRANSISTOR 2SD2144S
Q151	8-729-119-78	TRANSISTOR 2SC2785
Q152	8-729-107-77	TRANSISTOR 2SC3623-L
Q201	8-729-922-37	TRANSISTOR 2SD2144S
Q251	8-729-119-78	TRANSISTOR 2SC2785
Q252	8-729-107-77	TRANSISTOR 2SC3623-L
Q301	8-729-922-37	TRANSISTOR 2SD2144S
Q401	8-729-922-37	TRANSISTOR 2SD2144S
Q511	8-729-107-77	TRANSISTOR 2SC3623-L
Q512	8-729-107-77	TRANSISTOR 2SC3623-L
Q513	8-729-107-77	TRANSISTOR 2SC3623-L
Q514	8-729-900-61	TRANSISTOR DTA114ES
Q515	8-729-900-80	TRANSISTOR DTC114ES
Q516	8-729-900-80	TRANSISTOR DTC114ES
Q517	8-729-173-38	TRANSISTOR 2SA733
Q518	8-729-900-80	TRANSISTOR DTC114ES
Q519	8-729-119-78	TRANSISTOR 2SC2785
Q520	8-729-119-78	TRANSISTOR 2SC2785
Q521	8-729-900-80	TRANSISTOR DTC114ES
Q551	8-729-900-89	TRANSISTOR DTC144ES
Q651	8-729-920-26	TRANSISTOR DTB114ES
Q652	8-729-920-26	TRANSISTOR DTB114ES
Q653	8-729-920-26	TRANSISTOR DTB114ES
Q654	8-729-900-80	TRANSISTOR DTC114ES
Q655	8-729-900-80	TRANSISTOR DTC114ES
Q701	8-729-900-80	TRANSISTOR DTC114ES
Q702	8-729-904-27	TRANSISTOR 2SD1761-E
Q703	8-729-904-27	TRANSISTOR 2SD1761-E
Q704	8-729-119-78	TRANSISTOR 2SC2785
Q705	8-729-110-33	TRANSISTOR 2SA1409-L
Q706	8-729-364-72	TRANSISTOR 2SB647
Q707	8-729-904-27	TRANSISTOR 2SD1761-E
Q708	8-729-107-77	TRANSISTOR 2SC3623-L
Q709	8-729-900-74	TRANSISTOR DTC143TS
Q710	8-729-119-78	TRANSISTOR 2SC2785
Q751	8-729-107-25	TRANSISTOR 2SD1585-L
Q752	8-729-119-78	TRANSISTOR 2SC2785
Q753	8-729-119-78	TRANSISTOR 2SC2785
Q754	8-729-900-74	TRANSISTOR DTC143TS
Q755	8-729-173-38	TRANSISTOR 2SA733
Q756	8-729-173-38	TRANSISTOR 2SA733
Q757	8-729-111-67	TRANSISTOR 2SB1094-L
Q801	8-729-900-65	TRANSISTOR DTA114ES
Q802	8-729-900-65	TRANSISTOR DTA114ES
Q803	8-729-900-65	TRANSISTOR DTA114ES
Q804	8-729-177-43	TRANSISTOR 2SD774
Q805	8-729-801-83	TRANSISTOR 2SB1013
Q806	8-729-801-83	TRANSISTOR 2SB1013
Q807	8-729-205-02	TRANSISTOR 2SA1150
Q808	8-729-801-83	TRANSISTOR 2SB1013
Q809	8-729-801-93	TRANSISTOR 2SD1387
Q810	8-729-801-93	TRANSISTOR 2SD1387
Q811	8-729-801-83	TRANSISTOR 2SB1013
Q812	8-729-900-61	TRANSISTOR DTA114ES
Q851	8-729-900-61	TRANSISTOR DTA114ES
Q852	8-729-900-61	TRANSISTOR DTA114ES
Q901	8-729-900-61	TRANSISTOR DTA114ES
Q902	8-729-900-61	TRANSISTOR DTA114ES

Ref.No.	Part No.	Description
Q903	8-729-900-61	TRANSISTOR DTA114ES
Q904	8-729-900-61	TRANSISTOR DTA114ES
Q905	8-729-900-61	TRANSISTOR DTA114ES
Q906	8-729-900-61	TRANSISTOR DTA114ES
Q907	8-729-900-61	TRANSISTOR DTA114ES
Q908	8-729-900-61	TRANSISTOR DTA114ES
Q909	8-729-900-89	TRANSISTOR DTC144ES
Q910	8-729-900-89	TRANSISTOR DTC144ES
Q1001	1-807-509-11	PHOTO SENSOR (HEAD SW)
Q1002	1-807-509-11	PHOTO SENSOR (HEAD SW)
R101	1-249-590-11	CARBON 39K 5% 1/4W
R102	1-247-700-11	CARBON 100 5% 1/4W
R103	1-249-603-11	CARBON 130K 5% 1/4W
R104	1-247-722-11	CARBON 5.6K 5% 1/4W
R105	1-247-716-11	CARBON 1.8K 5% 1/4W
R106	1-247-138-00	CARBON 2K 5% 1/4W
R107	1-247-887-00	CARBON 220K 5% 1/4W
R108	1-249-429-11	CARBON 10K 5% 1/4W
R109	1-249-431-11	CARBON 15K 5% 1/4W
R110	1-247-717-11	CARBON 2.2K 5% 1/4W
R111	1-249-415-11	CARBON 680 5% 1/4W
R112	1-249-427-11	CARBON 6.8K 5% 1/4W
R113	1-259-419-11	CARBON 430 5% 1/6W
R114	1-259-437-11	CARBON 2.4K 5% 1/6W
R115	1-259-443-11	CARBON 4.3K 5% 1/6W
R116	1-249-441-11	CARBON 100K 5% 1/4W
R117	1-249-429-11	CARBON 10K 5% 1/4W
R151	1-249-421-11	CARBON 2.2K 5% 1/4W
R152	1-249-441-11	CARBON 100K 5% 1/4W
R153	1-249-441-11	CARBON 100K 5% 1/4W
R154	1-249-423-11	CARBON 3.3K 5% 1/4W
R155	1-249-428-11	CARBON 8.2K 5% 1/4W
R156	1-259-419-11	CARBON 430 5% 1/6W
R157	1-259-443-11	CARBON 4.3K 5% 1/6W
R158	1-259-437-11	CARBON 2.4K 5% 1/6W
R159	1-249-427-11	CARBON 6.8K 5% 1/4W
R160	1-249-415-11	CARBON 680 5% 1/4W
R161	1-247-722-11	CARBON 5.6K 5% 1/4W
R162	1-249-561-11	CARBON 2.4K 5% 1/4W
R163	1-247-725-11	CARBON 10K 5% 1/4W
R164	1-249-417-11	CARBON 1K 5% 1/4W
R165	1-249-469-11	CARBON 100K 5% 1/4W
R166	1-247-721-11	CARBON 4.7K 5% 1/4W
R167	1-249-435-11	CARBON 33K 5% 1/4W
R168	1-249-432-11	CARBON 18K 5% 1/4W
R169	1-249-393-11	CARBON 10 5% 1/4W
R170	1-247-883-00	CARBON 150K 5% 1/4W
R171	1-247-725-11	CARBON 10K 5% 1/4W
R301	1-259-436-11	CARBON 2.2K 5% 1/6W
R302	1-249-421-11	CARBON 2.2K 5% 1/4W
R303	1-215-453-00	METAL 22K 1% 1/6W
R304	1-215-457-00	METAL 33K 1% 1/6W
R305	1-249-408-11	CARBON 180 5% 1/4W
R306	1-249-436-11	CARBON 39K 5% 1/4W
R307	1-249-429-11	CARBON 10K 5% 1/4W
R308	1-247-713-11	CARBON 1K 5% 1/4W
R309	1-249-497-11	CARBON 33K 5% 1/4W
R311	1-249-433-11	CARBON 22K 5% 1/4W

Ref.No.	Part No.	Description			
R312	1-249-421-11	CARBON	2.2K	5%	1/4W
R313	1-247-862-11	CARBON	20K	5%	1/4W
R314	1-247-704-11	CARBON	220	5%	1/4W
R315	1-215-453-00	METAL	22K	1%	1/6W
R316	1-215-454-00	METAL	24K	1%	1/6W
R351	1-249-425-11	CARBON	4.7K	5%	1/4W
R503	1-249-437-11	CARBON	47K	5%	1/4W
R504	1-215-469-00	METAL	100K	1%	1/6W
R511	1-249-429-11	CARBON	10K	5%	1/4W
R512	1-249-437-11	CARBON	47K	5%	1/4W
R513	1-249-437-11	CARBON	47K	5%	1/4W
R514	1-215-469-00	METAL	100K	1%	1/6W
R515	1-249-429-11	CARBON	10K	5%	1/4W
R516	1-249-429-11	CARBON	10K	5%	1/4W
R517	1-249-429-11	CARBON	10K	5%	1/4W
R519	1-247-864-11	CARBON	24K	5%	1/4W
R520	1-249-441-11	CARBON	100K	5%	1/4W
R521	1-249-421-11	CARBON	2.2K	5%	1/4W
R522	1-249-427-11	CARBON	6.8K	5%	1/4W
R523	1-249-437-11	CARBON	47K	5%	1/4W
R524	1-249-426-11	CARBON	5.6K	5%	1/4W
R525	1-247-840-00	CARBON	2.4K	5%	1/4W
R526	1-249-425-11	CARBON	4.7K	5%	1/4W
R527	1-249-440-11	CARBON	82K	5%	1/4W
R528	1-249-440-11	CARBON	82K	5%	1/4W
R529	1-249-390-11	CARBON	5.6	5%	1/4W
R530	1-249-429-11	CARBON	10K	5%	1/4W
R531	1-249-429-11	CARBON	10K	5%	1/4W
R532	1-249-431-11	CARBON	15K	5%	1/4W
R533	1-249-434-11	CARBON	27K	5%	1/4W
R534	1-249-439-11	CARBON	68K	5%	1/4W
R551	1-249-437-11	CARBON	47K	5%	1/4W
R552	1-249-437-11	CARBON	47K	5%	1/4W
R553	1-249-429-11	CARBON	10K	5%	1/4W
R554	1-249-421-11	CARBON	2.2K	5%	1/4W
R555	1-249-409-11	CARBON	220	5%	1/4W
R601	1-249-435-11	CARBON	33K	5%	1/4W
R602	1-247-874-11	CARBON	62K	5%	1/4W
R603	1-247-880-11	CARBON	110K	5%	1/4W
R604	1-247-876-11	CARBON	75K	5%	1/4W
R605	1-249-435-11	CARBON	33K	5%	1/4W
R606	1-247-874-11	CARBON	62K	5%	1/4W
R607	1-247-887-00	CARBON	220K	5%	1/4W
R608	1-249-439-11	CARBON	68K	5%	1/4W
R609	1-249-440-11	CARBON	82K	5%	1/4W
R610	1-249-441-11	CARBON	100K	5%	1/4W
R611	1-249-437-11	CARBON	47K	5%	1/4W
R612	1-249-439-11	CARBON	68K	5%	1/4W
R613	1-247-885-00	CARBON	180K	5%	1/4W
R614	1-249-441-11	CARBON	100K	5%	1/4W
R615	1-249-437-11	CARBON	47K	5%	1/4W
R616	1-249-438-11	CARBON	56K	5%	1/4W
R617	1-247-872-11	CARBON	51K	5%	1/4W
R618	1-247-876-11	CARBON	75K	5%	1/4W
R651	1-249-425-11	CARBON	4.7K	5%	1/4W
R652	1-249-405-11	CARBON	100	5%	1/4W
R653	1-249-435-11	CARBON	33K	5%	1/4W

Ref.No.	Part No.	Description			
R654	1-249-425-11	CARBON	4.7K	5%	1/4W
R655	1-249-427-11	CARBON	6.8K	5%	1/4W
R701	1-249-413-11	CARBON	470	5%	1/4W
R702	1-249-425-11	CARBON	4.7K	5%	1/4W
R703	1-249-429-11	CARBON	10K	5%	1/4W
R704	1-249-421-11	CARBON	2.2K	5%	1/4W
R705	1-249-421-11	CARBON	2.2K	5%	1/4W
R706	1-249-426-11	CARBON	5.6K	5%	1/4W
R707	1-249-429-11	CARBON	10K	5%	1/4W
R708	1-249-433-11	CARBON	22K	5%	1/4W
R709	1-247-752-11	CARBON	1K	5%	1/2W
R710	1-249-417-11	CARBON	1K	5%	1/4W
R711	1-249-425-11	CARBON	4.7K	5%	1/4W
R712	1-249-426-11	CARBON	5.6K	5%	1/4W
R713	1-249-417-11	CARBON	1K	5%	1/4W
R751	1-247-710-11	CARBON	560	5%	1/4W
R752	1-247-714-11	CARBON	1.2K	5%	1/4W
R753	1-247-704-11	CARBON	220	5%	1/4W
R754	1-247-725-11	CARBON	10K	5%	1/4W
R755	1-247-708-11	CARBON	470	5%	1/4W
R756	1-247-717-11	CARBON	2.2K	5%	1/4W
R757	1-247-717-11	CARBON	2.2K	5%	1/4W
R758	1-247-717-11	CARBON	2.2K	5%	1/4W
R759	1-247-717-11	CARBON	2.2K	5%	1/4W
R801	1-249-441-11	CARBON	100K	5%	1/4W
R802	1-249-425-11	CARBON	4.7K	5%	1/4W
R803	1-249-441-11	CARBON	100K	5%	1/4W
R805	1-249-437-11	CARBON	47K	5%	1/4W
R806	1-247-903-00	CARBON	1M	5%	1/4W
R807	1-247-887-00	CARBON	220K	5%	1/4W
R808	1-247-887-00	CARBON	220K	5%	1/4W
R809	1-249-435-11	CARBON	33K	5%	1/4W
R810	1-249-435-11	CARBON	33K	5%	1/4W
R811	1-249-409-11	CARBON	220	5%	1/4W
R812	1-249-409-11	CARBON	220	5%	1/4W
R813	1-249-418-11	CARBON	1.2K	5%	1/4W
R814	1-249-423-11	CARBON	3.3K	5%	1/4W
R815	1-249-423-11	CARBON	3.3K	5%	1/4W
R816	1-249-417-11	CARBON	1K	5%	1/4W
R817	1-249-417-11	CARBON	1K	5%	1/4W
R818	1-249-414-11	CARBON	560	5%	1/4W
R819	1-249-417-11	CARBON	1K	5%	1/4W
R820	1-247-840-00	CARBON	2.4K	5%	1/4W
R821	1-249-417-11	CARBON	1K	5%	1/4W
R822	1-249-417-11	CARBON	1K	5%	1/4W
R823	1-249-437-11	CARBON	47K	5%	1/4W
R824	1-249-437-11	CARBON	47K	5%	1/4W
R825	1-249-437-11	CARBON	47K	5%	1/4W
R826	1-249-437-11	CARBON	47K	5%	1/4W
R827	1-249-437-11	CARBON	47K	5%	1/4W
R828	1-249-437-11	CARBON	47K	5%	1/4W
R829	1-249-437-11	CARBON	47K	5%	1/4W
R830	1-249-437-11	CARBON	47K	5%	1/4W
R831	1-249-437-11	CARBON	47K	5%	1/4W
R832	1-249-437-11	CARBON	47K	5%	1/4W
R833	1-249-437-11	CARBON	47K	5%	1/4W
R834	1-249-430-11	CARBON	12K	5%	1/4W



Ref.No.	Part No.	Description
R835	1-247-862-11	CARBON 20K 5% 1/4W
R836	1-249-431-11	CARBON 15K 5% 1/4W
R837	1-249-425-11	CARBON 4.7K 5% 1/4W
R838	1-249-437-11	CARBON 47K 5% 1/4W
R839	1-249-405-11	CARBON 100 5% 1/4W
R840	1-249-429-11	CARBON 10K 5% 1/4W
R851	1-247-903-00	CARBON 1M 5% 1/4W
R852	1-249-422-11	CARBON 2.7K 5% 1/4W
R853	1-249-432-11	CARBON 18K 5% 1/4W
R854	1-249-430-11	CARBON 12K 5% 1/4W
R855	1-249-437-11	CARBON 47K 5% 1/4W
R901	1-249-407-11	CARBON 150 5% 1/4W
R902	1-249-407-11	CARBON 150 5% 1/4W
R903	1-249-411-11	CARBON 330 5% 1/4W
R904	1-249-407-11	CARBON 150 5% 1/4W
R905	1-249-441-11	CARBON 100K 5% 1/4W
R906	1-249-441-11	CARBON 100K 5% 1/4W
R907	1-249-441-11	CARBON 100K 5% 1/4W
R908	1-249-441-11	CARBON 100K 5% 1/4W
R909	1-249-441-11	CARBON 100K 5% 1/4W
R910	1-249-441-11	CARBON 100K 5% 1/4W
R911	1-249-441-11	CARBON 100K 5% 1/4W
R912	1-249-441-11	CARBON 100K 5% 1/4W
R913	1-249-441-11	CARBON 100K 5% 1/4W
R914	1-249-441-11	CARBON 100K 5% 1/4W
R915	1-249-441-11	CARBON 100K 5% 1/4W
R916	1-249-441-11	CARBON 100K 5% 1/4W
R917	1-249-441-11	CARBON 100K 5% 1/4W
R918	1-249-441-11	CARBON 100K 5% 1/4W
R919	1-249-429-11	CARBON 10K 5% 1/4W
R920	1-249-437-11	CARBON 47K 5% 1/4W
R921	1-249-437-11	CARBON 47K 5% 1/4W
R922	1-249-437-11	CARBON 47K 5% 1/4W
R923	1-215-452-00	METAL 20K 1% 1/6W
R924	1-215-452-00	METAL 20K 1% 1/6W
R925	1-215-452-00	METAL 20K 1% 1/6W
R926	1-215-452-00	METAL 20K 1% 1/6W
R927	1-215-452-00	METAL 20K 1% 1/6W
R928	1-215-452-00	METAL 20K 1% 1/6W
R929	1-215-452-00	METAL 20K 1% 1/6W
R930	1-215-445-00	METAL 10K 1% 1/6W
R931	1-215-445-00	METAL 10K 1% 1/6W
R932	1-215-445-00	METAL 10K 1% 1/6W
R933	1-215-445-00	METAL 10K 1% 1/6W
R934	1-215-445-00	METAL 10K 1% 1/6W
R935	1-215-445-00	METAL 10K 1% 1/6W
R936	1-215-460-00	METAL 43K 1% 1/6W
R937	1-215-425-00	METAL 1.5K 1% 1/6W
RV101	1-228-993-00	RES. ADJ. CARBON 5K
RV151	1-228-995-00	RES. ADJ. CARBON 20K
RV152	1-228-995-00	RES. ADJ. CARBON 22K (REC BIAS (L))
RV201	1-228-993-00	RES. ADJ. CARBON 5K
RV251	1-228-995-00	RES. ADJ. CARBON 20K
RV252	1-228-995-00	RES. ADJ. CARBON 22K (REC BIAS (R))
RV511	1-238-097-11	RES. VAR. CARBON 20K/20K (REC LEVEL)
RV512	1-238-085-11	REA. VAR. CARBON 20K/20K (PHONES LEVEL)
RV513	1-238-373-11	RES. VAR. CARBON 5K (BIAS)

Ref.No.	Part No.	Description
S511	1-571-741-11	SWITCH, ROTARY (DOLBY NR)
S512	1-571-742-11	SWITCH, ROTARY (MPX FILTER)
S701	1-570-103-21	SWITCH, PUSH (1 KEY)(POWER)
S702	1-570-307-11	(E)....SWITCH, VOLTAGE CHANGE
S801	1-571-742-11	SWITCH, ROTARY (MONITOR)
S901	1-554-596-21	SWITCH, KEY BOARD (■)
S902	1-554-596-21	SWITCH, KEY BOARD (▶▶)
S903	1-554-596-21	SWITCH, KEY BOARD (◀◀)
S904	1-554-596-21	SWITCH, KEY BOARD (▷)
S905	1-554-596-21	SWITCH, KEY BOARD (REC●)
S906	1-554-596-21	SWITCH, KEY BOARD (PAUSE II)
S907	1-554-596-21	SWITCH, KEY BOARD (REC MUTE●)
S908	1-554-596-21	SWITCH, KEY BOARD (TAPE OPERATION)
S909	1-554-596-21	SWITCH, KEY BOARD (RESET)
S910	1-554-596-21	SWITCH, KEY BOARD (MEMORY)
S911	1-554-423-00	SWITCH, SLIDE (TIMER)
S1001	1-571-081-11	SWITCH (ERASE PROOF)
S1002	1-571-081-11	SWITCH (CASSETTE HALF DET)
S1003	1-571-081-11	SWITCH (70u DET)
S1004	1-571-081-11	SWITCH (METAL DET)
S1005	1-571-820-11	SWITCH, LEAF
SPK101	1-235-186-00	ENCAPSULATED COMPONENT
SPK151	1-235-186-00	ENCAPSULATED COMPONENT
SPK201	1-235-186-00	ENCAPSULATED COMPONENT
SPK251	1-235-186-00	ENCAPSULATED COMPONENT
T151	1-433-344-11	TRANSFORMER, BIAS OSCILLATION
T251	1-433-344-11	TRANSFORMER, BIAS OSCILLATION
T511	1-433-343-11	TRANSFORMER, BIAS OSCILLATION
T701	1-449-484-11	(AEP,UK)....TRANSFORMER, POWER
T701	1-449-575-11	(E).....TRANSFORMER, POWER
T701	1-449-576-11	(US,K630)...TRANSFORMER, POWER
THP701	1-808-612-11	THERMISTOR, POSITIVE
X801	1-567-772-11	VIBRATOR, CERAMIC 4.19MHz
X851	1-527-532-00	OSCILLATOR, CERAMIC 400kHz

## ACCESSORY & PACKING MATERIAL

1-465-104-11	(E)...REMOTE COMMANDER (RM-J600)
1-551-734-11	CORD, CONNECTION (RK-74A)
*3-349-005-01	CUSHION
*3-577-909-31	(K630ES)...INDIVIDUAL CARTON
*3-577-909-51	(K630)...INDIVIDUAL CARTON
3-750-049-11	(AEP,UK,E)...MANUAL, INSTRUCTION
3-750-049-21	(US).....MANUAL, INSTRUCTION
3-750-049-31	(K630)...MANUAL, INSTRUCTION
3-750-049-41	(AEP).....MANUAL, INSTRUCTION
3-703-450-01	(US)...INSTRUCTION
3-750-274-41	(E)....INSTRUCTION
4-384-285-01	(E)...COVER, BATTERY

**Note:**  
The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

**Note:**  
Les composants identifiés par une marque  $\Delta$  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.